

**Typical Applications**

Typical applications are in power factor correction(PFC), solar inverter, uninterruptible power supply, motor drives, photovoltaic inverter, electric car and charger.

**Mechanical Data**

**Package:** TO-247AB

Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free

**Terminals:** Tin plated leads

**Polarity:** As marked

**Maximum Ratings** ( $T_C=25$  Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	VALUE
Device marking code			D112020NCTCG2
Reverse voltage (Repetitive peak) @ $T_J=25^\circ\text{C}$	$V_{RRM}$	V	1200
Reverse voltage (Surge peak) @ $T_J=25^\circ\text{C}$	$V_{RSM}$	V	1200
Reverse voltage (DC) @ $T_J=25^\circ\text{C}$			

$=164^\circ\text{C}$			10/20
Non-repetitive peak forward surge current @ $T_C=25^\circ\text{C}$ , $t_p=10\text{ms}$ , Half Sine Wave	$I_{FSM}$	A	86 <sup>(1)</sup>
Power Dissipation@ $T_C=25^\circ\text{C}$	$P_{TOT}$	W	272/535
Power Dissipation@ $T_C=110^\circ\text{C}$			118/232
$i^2t$ Value@ $T_C=25^\circ\text{C}$ , $t_p=10\text{ms}$	$i^2t$	$\text{A}^2\text{S}$	36 <sup>(1)</sup>



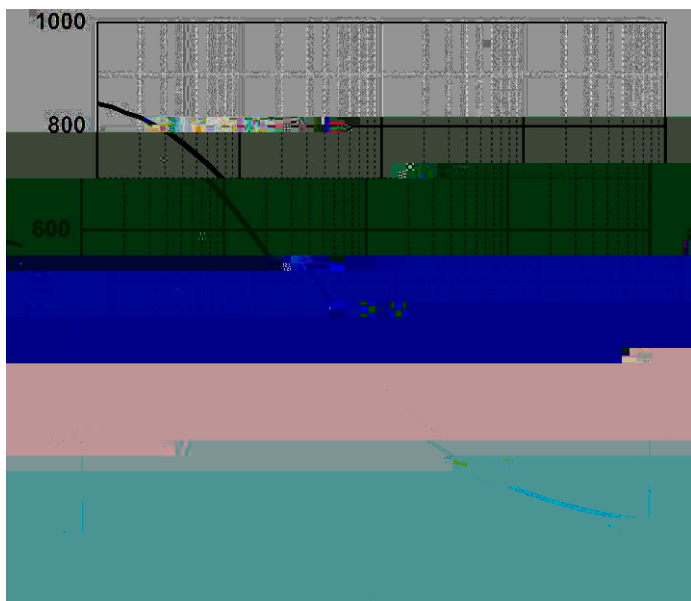


Figure 3. Capacitance vs. Reverse Voltage

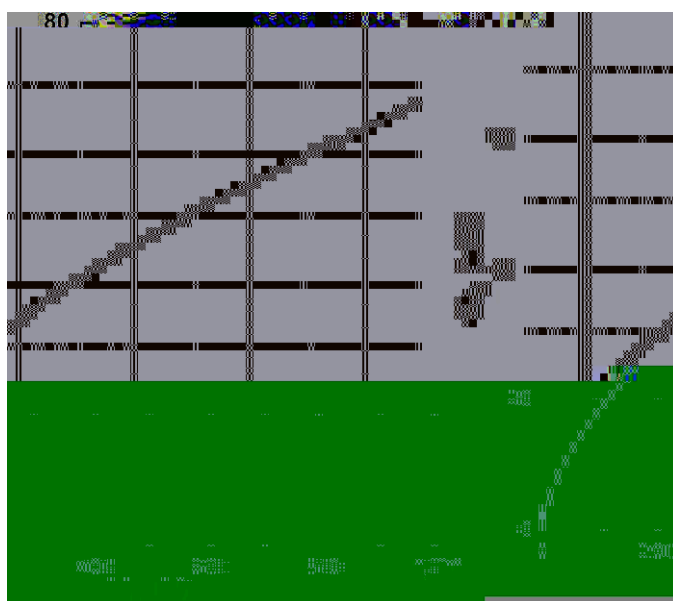


Figure 4. Total Capacitance Charge vs. Reverse Voltage

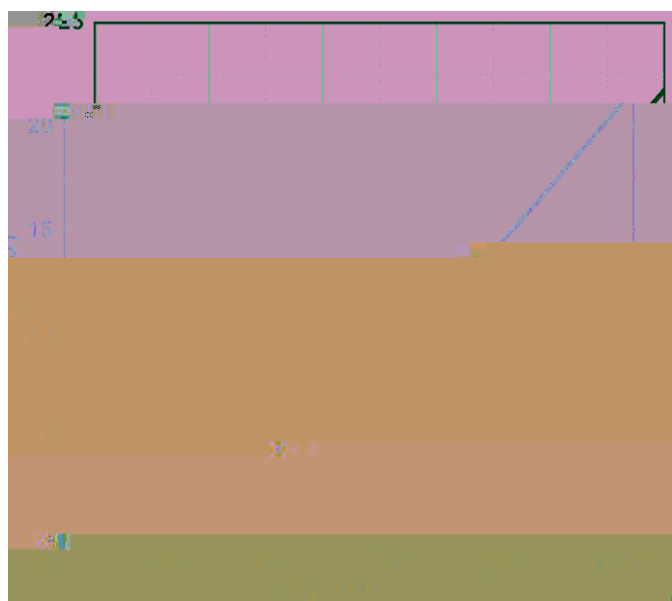


Figure 5. Capacitance Stored Energy

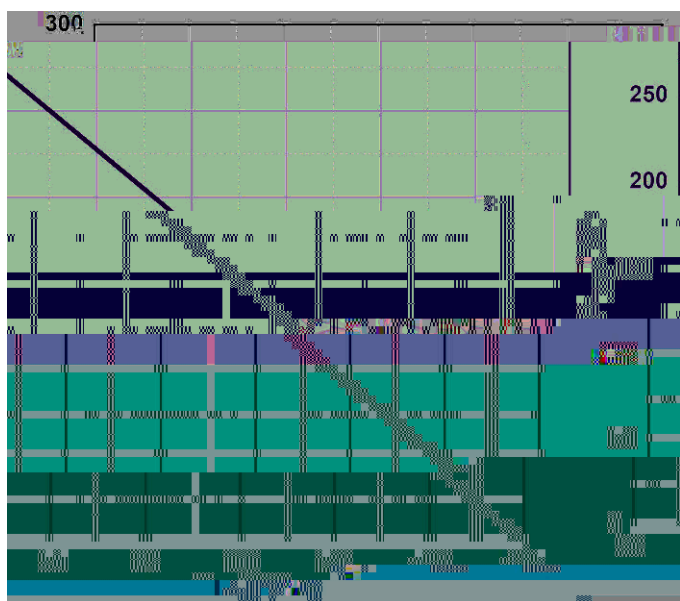


Figure 6. Power Derating

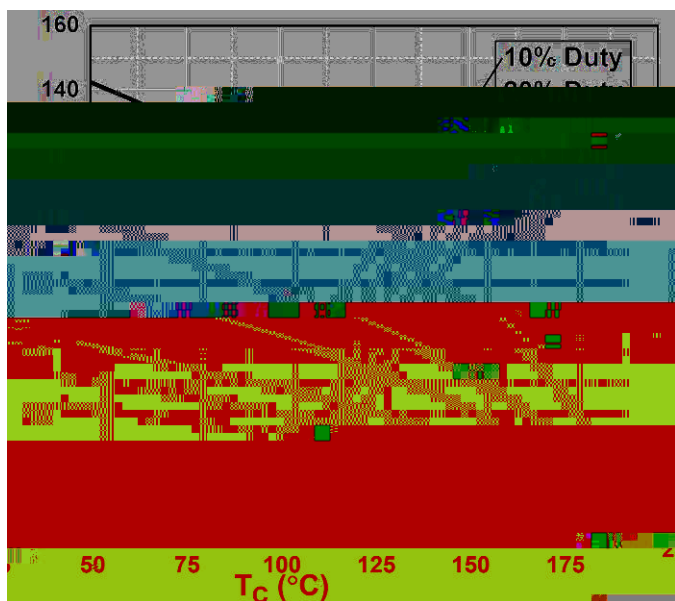
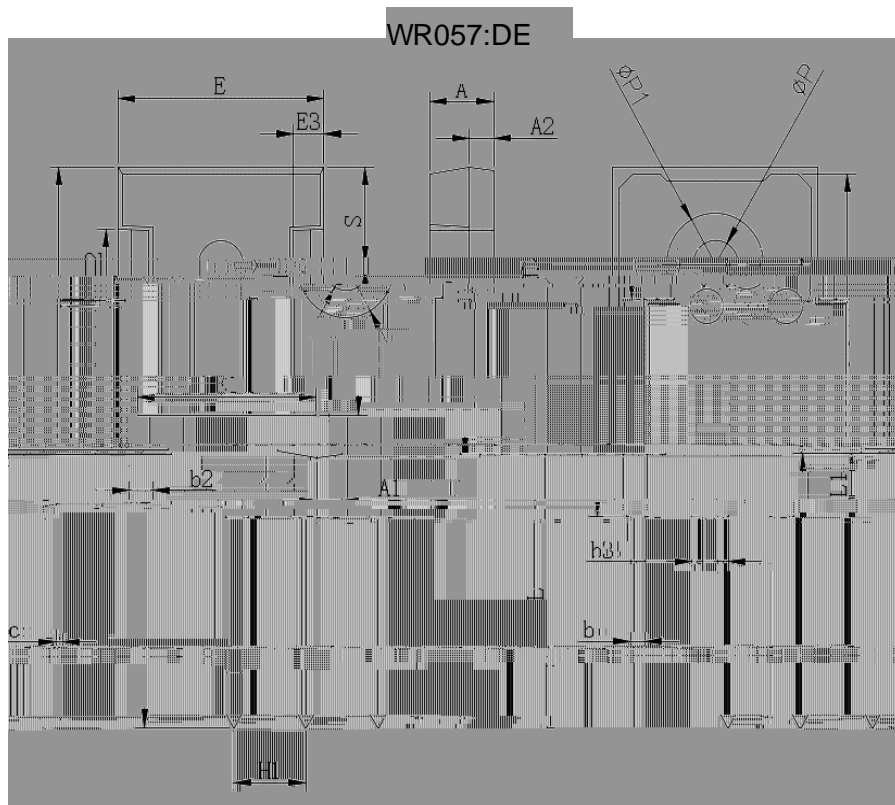


Figure 7. Current Derating



Outline Dimensions



TO-247AB		
Dim	Min	Max
A	4.80	5.20
A1	2.21	2.61
A2	1.85	2.15
b	1.0	1.4
b2	1.91	2.21
C	0.5	0.7
D	20.70	21.30
D1	16.25	16.85
E	15.50	16.10
E1	13.0	13.6
E2	4.80	5.20
E3	2.30	2.70
L	19.62	20.22
L1	-	4.30
P	3.40	3.80
P1	-	7.30
S	6.15TYP	
H1	5.44TYP	
b3	2.80	3.20



### Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.